

Notice of Allowability

Application No.

10/623,040

Examiner

Gertrude Arthur-Jeanglaude

Applicant(s)

SUGITANI ET AL.

Art Unit

3661

NW

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment of 4/22/04.
2. ☒ The allowed claim(s) is/are 1-6.
3. ☒ The drawings filed on 18 July 2003 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date _____.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Gertrude A. Jeanglaude
GERTRUDE A. JEANGLAUDE
PRIMARY EXAMINER

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Curtis Hamre (Reg # 29,165) on June 28, 2004.

The application has been amended as follows: In claim 3, after the word program at line 1, insert --embodied on a computer readable medium - -.

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance: The prior art fails to disclose an apparatus or program for determining linearity of tire characteristic, which causes a computer to execute a process to determine whether tires of a traveling vehicle stand in a linear region or in a non-linear region of the tire characteristic, the process comprising the steps of receiving at least one of an operation amount of an operation unit with which a driver of the traveling vehicle performs a steering operation and an actually steered amount of steerable wheels of the traveling vehicle, which are detected by an operation amount detector and a steered amount detector, respectively; determining a first sign of one of the vehicle behavior deviation and the rate of change

Art Unit: 3661

of the vehicle behavior deviation, and a second sign of the actual vehicle behavior indicator; if the first and second signs are both positive and the rate of change of the vehicle behavior deviation is greater than a first prescribed value, determining that the tires of the traveling vehicle stand in the non-linear region of the tire any characteristic; and if the first and second signs are both negative and the rate of change of the vehicle behavior deviation is less than a second prescribed value, determining that the tires of the traveling vehicle stand in the non-linear region of the tire characteristic.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gertrude Arthur-Jeanglaude whose telephone number is (703) 308-7564. The examiner can normally be reached on Monday-Friday from 8:30 a.m. to 6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on (703) 305-8233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3661

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GAJ

GAJ

May 5, 2004

Gertrude A. Jeanglaude
GERTRUDE A. JEANGLAUDE
PRIMARY EXAMINER

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance: The prior art fails to disclose an apparatus or program for determining linearity of tire characteristic, which causes a computer to execute a process to determine whether tires of a traveling vehicle stand in a linear region or in a non-linear region of the tire characteristic, the process comprising the steps of receiving at least one of an operation amount of an operation unit with which a driver of the traveling vehicle performs a steering operation and an actually steered amount of steerable wheels of the traveling vehicle, which are detected by an operation amount detector and a steered amount detector, respectively; determining a first sign of one of the vehicle behavior deviation and the rate of change of the vehicle behavior deviation, and a second sign of the actual vehicle behavior indicator; if the first and second signs are both positive and the rate of change of the vehicle behavior deviation is greater than a first prescribed value, determining that the tires of the traveling vehicle stand in the non-linear region of the tire any characteristic; and if the first and second signs are both negative and the rate of change of the vehicle behavior deviation is less than a second prescribed value, determining that the tires of the traveling vehicle stand in the non-linear region of the tire characteristic.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

Art Unit: 3661

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gertrude Arthur-Jeanglaude whose telephone number is (703) 308-7564. The examiner can normally be reached on Monday-Friday from 8:30 a.m. to 6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on (703) 305-8233. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GAJ

GAJ

May 5, 2004

Gertrude A. Jeanglaude
GERTRUDE A. JEANGLAUDE
PRIMARY EXAMINER